Can Xenon lights affect vision?

Dr. Edgar Leuenberger, Asian Eye Institute  March 2009

If you’ve ever been in a car and had to turn away from the glare of the headlights of an oncoming car, you probably experienced the effect of xenon lights, also called high intensity discharge lamps or HID.

Xenon headlights are the newer generation lights that are up to three times brighter than halogen lights. They contain xenon gas, an odorless gas that magnifies light. Used in headlights, xenon lights produce a more uniform intensity, allowing drivers to see the road much more clearly. It also makes street signs “glow” for more visibility.

According to Dr. Edgar Leuenberger, Asian Eye Institute glaucoma and cataract specialist, the use of xenon lights comes with a degree of responsibility. While it appeals to car owners because of longer lamp life, lower power consumption, and attractive bluish tint, it is not without risk.

“For someone with minimal cataract condition,” he says with emphasis, “the severe blinding glare caused by xenon lights can cause temporary blurry vision that may lead to accidents.”

He adds that although there are no studies yet to show the effect of xenon lights on vision, there may be risk of eye damage from prolonged exposure because they emit ultraviolet (UV) rays.

“It’s like being exposed to the sun. There’s a small risk of a big problem and it’s better not to take that risk.”

There are other lookouts for drivers. “If you have a full trunk, the hood goes up causing the lights coming from the xenon lamps to beam higher. You have to be careful that the lights aren’t aimed at the windshield of the oncoming driver, to avoid temporarily blinding others with the glare,” he explains.

So if you have a car with xenon headlights, control their beam to avoid accidents. Check with the car manufacturer on safety features related to the headlights. Dr. Leuenberger also advises that if you have an eye condition, get your vision tested before driving at night.

Dr. Edgar U. Leuenberger is one of Asian Eye Institute’s glaucoma specialists and Glaucoma Fellowship Program Director. He trained in adult and pediatric glaucoma under the Glaucoma Service of the Massachusetts Eye and Ear Infirmary, Harvard Medical School, and world-renowned expert Dr. David Walton. He returned to the Philippines as a Balik-Scientist Awardee of the Department of Science and Technology.

At present, he is also Assistant Professor and Head of the Glaucoma Service, Department of Ophthalmology at the University of the East – Ramon Magsaysay Memorial Medical Center. Dr. Edgar Leuenberger is Board Examiner of the Philippine Board of Ophthalmology and Reviewer of the Asian Journal of Ophthalmology.

His clinical interests are micro-incision cataract and glaucoma surgery. His main research interests are improvement and development of glaucoma diagnostic and surgical procedures. He has published journal articles, book chapters, teaching materials, and lectures nationally and internationally.